Currently Pending Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

- 1. (Previously presented) An isolated polypeptide of the structure or formula S-(L)_n-B wherein:
- (a) S is selected from the group consisting of PTH(1-9)

 (AlaValSerGluIleGlnLeuMetHis) (SEQ ID NO: 1), PTH(1-5) (AlaValSerGluIle) (SEQ ID NO: 4) or PTH (1-11) (AlaValSerGluIleGlnLeuMetHisAsnLeu) (SEQ ID NO: 46);
 - (b) L is a glycine present n times;
 - (c) n is 5 to 10; and
 - (d) B is a carboxy terminal binding domain of PTH(1-34) or PTHrP(1-34), wherein said carboxy terminal binding domain binds to a PTH- receptor 1 molecule

wherein said polypeptide stimulates intracellular accumulation of cyclic cAMP.

2-4. (Canceled)

- 5. (Previously presented) The isolated polypeptide of claim 1, wherein L is selected from the group consisting of Gly₅, Gly₇ and Gly₉.
- 6. (Previously presented) The isolated polypeptide of claim 1, wherein B is selected from the group consisting of PTH(15-31) (LeuAsnSerMetGluArgValGluTrpLeuArgLysLys

LeuGlnAspVal) (SEQ ID NO:2), PTH(17-31) (SerMetGluArgValGluTrpLeuArgLysLysLeuGlnAspVal) (SEQ ID NO:63), PTHrP (15-31) (IleGlnAspLeuArgArgArgPhePheLeuHisHis LeuIleAlaGluIle) (SEQ ID NO:8), and PTHrP(17-31) (AspLeuArgArgArgPhePheLeuHisHis LeuIleAlaGluIle) (SEQ ID NO:12).

- 9. (Original) The isolated polypeptide of claim 8 wherein there is a single amino acid substitution.
- 10. (Previously presented) An isolated polypeptide of the structure or formula S-(L)_n-B wherein:
 - (a) S is X Val X Glu X X X His (SEQ ID NO: 42), wherein X is an amino acid;
 - (b) L is glycine and n equals 5-10; and
 - (c) B is a carboxy terminal binding domain of PTH(1-34) or PTHrP(1-34), wherein said carboxy terminal binding domain binds to a PTH-receptor 1 molecule, wherein said polypeptide stimulates intracellular accumulation of cyclic cAMP.
- 11. (Previously presented) An isolated polypeptide of the structure or formula S-(L)_n- B wherein :
 - (a) S is Ser Val Ser Glu Ile Gln Leu Met His (SEQ ID NO: 44);
 - (b) L is 5-10 glycine residues; and
 - (c) B is Leu Asn Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val (SEQ ID NO: 45).

12-13. (Canceled).

14. (Previously presented) An isolated polypeptide encoded by a nucleic acid sequence selected from the group consisting of: SEQ ID NO:14, SEQ ID NO:15 and SEQ ID NO:16.

15-42. (Canceled)

and

- 43. (Currently amended) A compound of the structure or formula S-(L)_n-B wherein:
- (a) S is selected from the group consisting of PTH(1-9)

(AlaValSerGluIleGlnLeuMetHis) (SEQ ID NO: 1), PTH(1-5)

(AlaValSerGluIle) (SEQ ID NO: 4) or PTH (1-11)

(AlaValSerGluIleGlnLeuMetHisAsnLeu) (SEQ ID NO: 46);

- (b) L is a linker molecule present n times;
- (c) n is an integer from 1-9; and
- (d) B is a carboxy terminal binding domain of PTH(1-34) or PTHrP(1-34), wherein said carboxy terminal binding domain binds to a PTH- receptor 1 molecule;

wherein said compound stimulates intracellular accumulation of cyclic cAMP;

wherein said linker molecule L is a glycine an aliphatic diamine.

- 44. (Previously presented) The isolated polypeptide of claim 7, wherein said polypeptide is modified to improve the solubility, absorption, or biological half-life of said polypeptide and wherein said modification is selected from the group consisting of the addition of C_{1-12} alkyl groups, the addition of C_{1-12} hydroxyalkyl groups, the addition of acyl groups, and lactam cyclization.
- 45. (Previously presented) The isolated polypeptide of claim 8, wherein said polypeptide is modified to improve the solubility, absorption, or biological half-life of said polypeptide and wherein said modification is selected from the group consisting of the addition of C_{1-12} alkyl groups, the addition of C_{1-12} hydroxyalkyl groups, the addition of acyl groups, and lactam cyclization.
- 46. (Previously presented) The isolated polypeptide of claim 1, wherein n is an integer from 5 to 9.